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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/762,881	03/27/2001	Subhash Narang	360.07-US1	1944
34284	7590	07/02/2004	EXAMINER	
ROBERT D. FISH; RUTAN & TUCKER, LLP P.O. BOX 1950 611 ANTON BLVD., 14TH FLOOR COSTA MESA, CA 92628-1950			PADGETT, MARIANNE L	
			ART UNIT	PAPER NUMBER
			1762	

DATE MAILED: 07/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/762,881

Applicant(s)

Subhash Narang

Examiner

M.L. Padgett

Group Art Unit

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— The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address —

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

☒ Responsive to communication(s) filed on 2/27/04 & 1/6/04

☒ This action is **FINAL**.

- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 1 - 16 & 19 - 24 is/are pending in the application.
- Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 1 - 4, 6 - 16 & 19 - 24 is/are rejected.
- ☒ Claim(s) 5, 12 is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement

## Application Papers

- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119 (a)-(d).
- ☐ All ☐ Some\* ☐ None of the:
- ☐ Certified copies of the priority documents have been received.
- ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
- ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a))

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_ ☐ Interview Summary, PTO-413
- ☒ Notice of Reference(s) Cited, PTO-892 ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948 ☐ Other \_\_\_\_\_

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1. As applicant should be aware, the only types of cases where amendments made in a parent case are automatically entered in the continuing case, have been when they are all in the same file wrapper, i.e., physically the same case; i.e. file-wrapper-continuation and CPA (no longer in use) also RCE. Changes made in PCT cases have never been automatically entered (applicant may attempt to point out rules that says they are, but the examiner has never heard of one), and the examiner knows of no reasons why anyone would write a rule that says something that has never been done, is not to be done, so the examiner cannot point such a rule out to the attorney as requested.

2. The rejections over the Baum references are removed by the amendments, as these processes deposit the solution over the entire surface as their intended pattern, then selectively pattern with their light irradiation energy source. Youtsey et al while screen-printing in a desired pattern, employs depositions with greater than the now claimed percentage of particulates.

3. Claims 2, 3, 7, 11 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 24, line 5, see "a first later", which is assumed to be a typographical error, but creates logic and antecedence problems for the claim as written.

As noted in the mailing of paper No. 8 (mailed 7/15/2003) and the Office action of paper No. 6 (mailed 4/28/2003), the relative terms rejected in section No. 1 of the latter remain, nor have applicant supplied any arguments to define them or their intended scope.

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4. Claim 15 remains rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

Claim 15 remains rejected as lacking enablement as discussed in Section 2 of paper# 6.

It is noted that "a rotating plate" was deleted from claim 9, but it remains in claim 15.

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later

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invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1-4, 6-8, 10-11, 14 and 22-23 are rejected under 35 U.S.C. 102(b) as being anticipated by Krause et al (4,775,556) as discussed in Section 7 of Paper No. 6 (mailed 4/28/2003).

Applicants argue exclusion of applied references because applicants' claims do not use masks, however, while there is no positive use of any masks, neither is there any necessary exclusion of use of masks to create the required "desired pattern" that is not the entire surface, or is a trace (i.e., any kind of line or elongated pattern, such as circuit pattern). A mask that shields the rest of the surface from an applied solution, reads on only applying the solution where exposed through lack of coverage by the mask. Applicants' claims do not require any specific means to achieve their pattern on application for the claims as presently written.

7. Claims 1-3, 6-8, 10-11, 14, 16 and 22-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Makkaev et al (4,576,689), as applied in Section 8 of Paper No. 6.

The arguments concerning masking, as discussed above in Section 6, also apply to Makkaev et al. Note in this reference that heat treatment of the entire surface, via UV or IR radiation is applied after application of solution. See column 5, lines 23-32 and examples.

8. Claims 1, 6-7, 10-11, 14 and 22-24 are rejected under 35 U.S.C. 102(e) as being anticipated by Lee et al (5,756,146) as discussed in Section 6 of Paper No. 6, mailed 4/28/2003.

The masking discussion of Section 6 above also applies to Lee et al. Also noted that column 8, lines 56-68 discuss heated plating bath, which due to conduction will apply energy to the entire substrate, maybe not evenly where masked, but still will cause general heating. In

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applicants' new claim 24, note that the application of energy as claimed can be at any time in the process, since order of listing a step makes no requirement concerning order of performing unless there are limitations requiring some order or antecedence.

9. Claims 19-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Makkaev et al or Krause or Lee et al, as applied in Section 9 of Paper No. 6.

No arguments concerning the rejections of these limitations were presented.

10. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Makkaev et al as applied to claims 1-3, 6-8, 10-11, 14, 16 and 19-24 above, and further in view of Cooper et al (5,116,582), as applied in Section 10, Paper No. 6.

No argument concerning this limitation was made in the response.

11. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

12. Claims 1-3, 6-11, 16, 19-20 and 22-24 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-5, 7, 9-12, 14, 16, 19-20, 22-26 and 28 of U.S. Patent No. 5,980,998 (Sharma et al). Although the conflicting claims are not identical, they are not patentably distinct from each other because while the claims of (998) do not say that precursor ligand deposit is a redox couple, read in light of the

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specification (column 5, line 55- column 6, line 44, esp. column 5, lines 63-66), it is clear that as the terms are defined therein, that it is a redox couple being claimed/used. Claims 22-23 make it clear that solutions are employed, and while no particulate % is claimed, the claims of the present invention are inclusive of NO particles, thus of overlapping scope. While the various limitations of the two sets of claims, are not presented in the same order, and are in paraphrased language, the overall cover overlapping scopes.

13. Claims 5 or 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

14. Other art of interest includes compending cases to Narang and Sharma et al, plus to Ugro, Jr., but while similar they use high percentage of particles.

15. Applicant's arguments filed January 6, 2004 and February 27, 2004, and discussed above, have been fully considered but they are not persuasive.

16. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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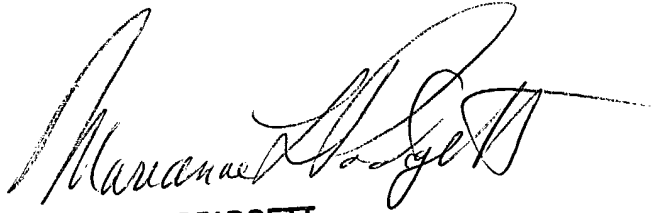
however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

17. Any inquiry concerning this communication from the examiner should be directed to Marianne L. Padgett whose telephone number is (571) 272-1425. The examiner can generally be reached on Monday-Friday from about 8:30 a.m. to 4:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive Beck can be reached on (571) 272-1415. The fax phone number for the organization where this application is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

M.L. Padgett/dh  
June 9, 2004  
June 30, 2004



**MARIANNE PADGETT  
PRIMARY EXAMINER**